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Anmelder/Applicant/Demandeur/Patentinhaber/Proprietor/Titulaire

Tosoh Corporation

## COMMUNICATION

The European Patent Office herewith transmits as an enclosure the European search report for the above-mentioned European patent application.

If applicable, copies of the documents cited in the European search report are attached.

☒ Additional set(s) of copies of the documents cited in the European search report is (are) enclosed as well.

The following specifications given by the applicant have been approved by the Search Division:

☐ abstract

☒ title

☒ The abstract was modified by the Search Division and the definitive text is attached to this communication.

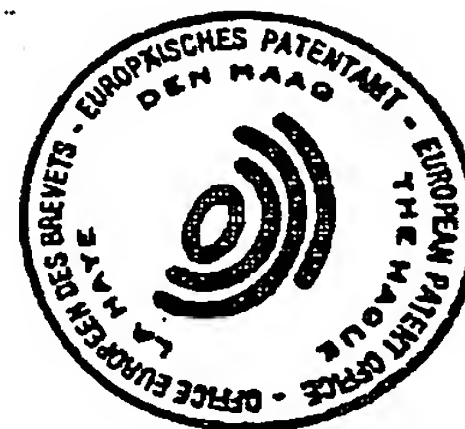
The following figure will be published together with the abstract:

NONE

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## REFUND OF THE SEARCH FEE

If applicable under Article 10 Rules relating to fees, a separate communication from the Receiving Section on the refund of the search fee will be sent later.





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## EUROPEAN SEARCH REPORT

Application Number  
EP 03 01 5987

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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
X V	US 5 455 283 A (TUCKER JOHN R ET AL) 3 October 1995 (1995-10-03) * column 2, line 8 - line 43 * * column 9, line 29 - column 10, line 18 * * example 1; table 1 *	1,10, 14-17,19	C08G18/09 C08G18/50 C08G18/18 C08G18/16
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D,A V	US 4 910 230 A (TAMANO YUTAKA ET AL) 20 March 1990 (1990-03-20) * column 2, line 64 - column 4, line 64 * * example 2; table 1 *	1-28	
			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
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The present search report has been drawn up for all claims			
Place of search MUNICH		Date of completion of the search 17 September 2003	Examiner Neugebauer, U
<div>CATEGORY OF CITED DOCUMENTS</div> <div><div>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</div><div>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons &amp; : member of the same patent family, corresponding document</div></div>			

**ANNEX TO THE EUROPEAN SEARCH REPORT  
ON EUROPEAN PATENT APPLICATION NO.**

EP 03 01 5987

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on  
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17-09-2003

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## ABSTRACT / ZUSAMMENFASSUNG / ABREGE

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The present invention relates to:

- (1) a catalyst for producing a rigid polyurethane foam by means of at least one blowing agent selected from the group consisting of 1,1,1,3,3-pentafluoropropane (HFC-245fa), 1,1,1,3,3-pentafluorobutane (HFC-365mfc) and a low boiling point hydrocarbon, which comprises:
  - (A) an aliphatic amine compound and at least one amine compound selected from the group consisting of triethylenediamine, N,N,N',N'-tetramethyl-1,6-hexanediamine and N,N-dimethylcyclohexylamine; or
  - (B) an amine compound having an alkyl ether group and/or an aryl ether group in its molecule;
- (2) a catalyst for producing a rigid polyisocyanurate foam by means of at least one blowing agent selected from the group consisting of 1,1,1,3,3-pentafluoropropane (HFC-245fa), 1,1,1,3,3-pentafluorobutane (HFC-365mfc) and a low boiling point hydrocarbon, which comprises an aliphatic amine compound and a polyisocyanurate catalyst and
- (3) a process for producing a rigid polyurethane foam excellent in the adhesive strength and flame retardancy of the foam and
- (4) a process for producing a rigid polyisocyanurate foam excellent in the flame retardancy, adhesive strength and dimensional stability of the foam.